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MEASUREMENTS OF A MALE AND FE-MALE SPECIMEN OF THE SEVEN-GILLED SHARK, HEPTRAN-CHIAS PERLO.

Comparisons between male and female sharks of one species are sometimes made, but it is very seldom that actual measurements are given that would allow of a detailed comparison in bodily proportions between the two sexes. The following measurements of male and female specimens of a rather rare species may be of interest. It would be well if some of our younger ichthyologists, who devote attention to the local faunas here and there, would record similar sets of measurements for some of our common species.

Heptranchias perlo, on account of having seven gills, is generally regarded as an ancient or archaic type of shark. It is the only species of its genus. It has a wide range (Atlantic, Mediterranean, Japan), although specimens of it are rather rare. The two here recorded are from Japan, and were both taken

in one season. They are in the collections of the American Museum:

Total length (including		THOUSANDTHS OF LENGTH.		
caudal)	98.0	95.0	1.000	1.000
Head (measured to first	cm.	cm.	21000	21000
gill opening)	15.5	15.5	.158	.163
Snout	4.7	4.8	.048	.051
Eye (horizontal diam.)	3.7	3.4	.038	.036
Interorbital space	6.5	6.2	.066	.065
Length of gill area	3.5	3.6	.036	.038
Length to origin of dor-				
sal	49.0	44.0	.500	.463
Base of dorsal	6.0	6.4	.061	.067
Length of caudal (meas-				
ured from origin of				
lower lobe)	31.0	30.0	.316	.316
Base of anal	5.6	5.4	.057	.057
" " pectoral " ventral	5.1	5.7	.052	.060
" " ventral	7.0	7.3	.071	.077
73 (11) 11	. 11			3 . 1.

From this table, especially columns 3 and 4, it appears that in this species the male and female are remarkably similar in all bodily proportions.

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THE SNAKES OF MONROE AND ORLEANS COUNTY, N. Y.

1. Diadophis punctatus (Linn.) Ring-necked Snake. April 15-October 15. Like the red-bellied snake, it is seldom observed in this region because of its nocturnal habits.

2. Liopeltis vernalis (Harlan) "Grass Snake," "Green Snake." April 10-October 20. We have taken this form mainly in the sphagnum bogs of the two counties, the last record being at Westbury, N. Y., June 1, 1918. It is frequently observed at Bergen Swamp, N. Y.

3. Coluber constrictor (Linn.) "Black Snake,"
"Racer." This species is becoming rare where it was
once common. The last record we have comes from
Bergen Swamp, where Miss J. Moesel, Anna A.
Wright and myself, found on August 18, 1918, a
skeleton and skin of a fine specimen.

4. Elaphe obsoleta (Say) "Black Snake." Pilot Snake. This form is rare in both Wayne and Monroe Counties. The most interesting record of it is one (summer of 1905) from North Rose, N. Y., where Mr. A. C. Weed captured a large black specimen in the act of eating young robins from the nest.

5. Lampropeltis triangulum (Lacepede) "Milk Snake," April 15-October 1. One of the best-known and frequent snakes of the region.

6. Natrix sipedon (Linn.). "Black Snake,"
"Water Snake." March 15-November 1. Common.
This like the pilot and racer is called indiscriminately
"black snake."

7. Storeria dekayi (Holbrook) "Brown Snake." We have few records of this form though it must be common. At Clyde, N. Y., on November 1, 1915, Mr. S. C. Bishop secured it; while at Hilton, N. Y., the writer took several in the summer of 1904, and the last specimen, August 19, 1907.

8. Storeria occipitomaculata (Storer) "Brown Snake" Red-bellied Snake. March 15-October 25. Rather infrequent in the region.

9. Thamnophis sauritus (Linn.) Ribbon Snake. March 15-November 1. This is common in wet situs tions. It is frequent in sphagnaceous and marly areas like Bergen and Mendon swamps of Monroe or in numerous similar areas of Wayne County. It also is often taken around the bays and swampy places of the shore of Lake Ontario.

10. Thamnophis sirtalis (Linn.) "Garter Snake." March 29-October 30. The most common snake of the region. Most commonly seen and found when gathered preceding hibernation and also in

spring when sunning themselves just after appear-

ance from hibernation.

11. Sistrurus catenatus (Rafinesque) "Rattle-Massasauga. Not uncommon in Bergen Swamp, N. Y., and rare at Westbury, N. Y. In addition to the records of Miss J. Moesel (COPEIA, No. 58, pp. 67, 68), we have another recent one of two adults taken August 18, 1918, by Anna A. Wright and the writer. One was taken while sunning itself in a sedgy stool in the open marly area. The other was at the wooded edge, and both gave warning. One when prepared for a specimen proved a gravid female about to give birth to young. Several members of the Botanical Section of the Roch. Acad. of Science (Mr. M. S. Baker, Miss Florence Beckwith, and others), assure me they have many times recorded them and the farmers about the swamp say the largest they have taken are about 20 inches in length.

12. Crotalus horridus Linn. Probably extinct in these two counties though reports occasionally appear from people who apparently are reliable. The species is still in some counties farther south along the Pennsylvania border. Their former abundance in the early decades of the nineteenth century is indicated by the statement of Enos Stone (Phelps and Gorham Purchase, 1851, p. 425) of Rochester. He

savs:

"The principal colony of the rattlesnakes was in bank of river below the Lower Falls (Genesee River), at a place we used to call "Rattle Snake Point"; and there was also a large colony at Allan's Creek, near the end of the Brighton plank road The oil was used for stiff joints and bruises; the gall for fevers, in the form of a pill, made up with chalk."

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